ABSTRACT OF THE DISCLOSURE

Projectile systems are provided herein employing an inhibiting and/or marking substance for impairing/marking a living target, such as a human or animal target, which projectile systems are optimized to provide maximum effectiveness by impacting the target with sufficient force to cause the target to move into a simultaneously radially dispersing inhibiting/marking substance contained within a capsule of the projectile system. In preferred embodiments, the projectile system includes a generally spherical capsule that is optimally filled to greater than about 50%, more preferably about 75% to 99% of its total volume, most preferably to about 90% of capacity, with the substance to be delivered to the target. The capsule is preferably formed as two about equal halves. Each half is then filled to about 90% of its capacity with the substance, which is compressed mechanically or a thin membrane, preferably a paper foil, is placed over the substance or the substance is mechanically compressed within each half to retain the same within the half capsule. The two half capsules are then brought together, for example, by snapping them together, and are then sealed to one another. In an alternative embodiment, the sealed capsule employs a plurality of dimples or a matrix of global scoring in an exterior or interior surface of the capsule of the projectile system to facilitate rupture of the capsule upon impact with a living target. The projectile systems described herein are easily and inexpensively manufactured; are readily incorporated into existing armed officer training programs; and are extremely effective at stopping, slowing and/or marking a living target.